

determine the risk(s) of living in the house you sampled, multiple the total above (11.0) times 2 equals 22.0 ng / M³

For risk of developing cancer from chronic exposure of chlordane in indoor air go to www.epa.gov/iris/subst/0142.htm, and then to section **II.C. Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure**. Heptachlor and chlordane are some of the most potent carcinogens tested in animal models. No human epidemiological study has been conducted to determine the relationship between levels of chlordane/heptachlor in indoor air and rates of cancer in inhabitants. However, studies have linked chlordane/heptachlor in human tissues with cancers of the breast, prostate, brain, and cancer of blood cells - leukemia and lymphoma. Breathing chlordane in indoor air is the main route of exposure and accumulates in human tissues especially fat. Currently, USEPA has defined a concentration of 10 ng/M³ for chlordane compounds over a 20-year exposure period as the concentration that will increase your probability of cancer by 1 in 1,000,000 persons. This probability of developing cancer increases to 10 in 1,000,000 persons with an exposure of 100 ng/M³, and 100 in 1,000,000 with an exposure of 1000 ng/M³.

For risk of non-cancer effects go to www.atsdr.cdc.gov/toxprofiles/tp31-c2.pdf then to page 85. The non-cancer health effects of chlordane compounds (migraines, respiratory infections, diabetes, anxiety, depression, and activated immune system) probably affect more people than cancer. ATSDR has defined a concentration of chlordane compounds of 20 ng/m³ for exposures greater than 365 days as the Minimal Risk Level (MRLs). ATSDR defines Minimal Risk Level as an estimate of daily human exposure to a dose of a chemical that is likely to be without an appreciable risk of adverse non-cancerous effects over a specific duration of exposure.

Also visit our web site for an exhaustive list of health effects and approaches for reducing indoor levels. www.toxfree.net.

Dr. Cassidy's YouTube Videos on chlordane health effects can be found at:

<https://www.youtube.com/channel/UCdFn1Q6pRiGhSE0mvCtomrQ>.

If you have further questions call 888.836.4489, cell 812.719.1163, or E-mail racassidy@psci.net.

Sincerely yours:

Richard A. Cassidy, Ph.D.
Toxicologist